



■ Researchers report they have created pigs that produce healthier fatty acids.

▶ Cloned Pigs Rich in Omega-3

Scientists at the NCRR-supported National Swine Research and Resource Center and their colleagues have succeeded in cloning pigs that produce healthier omega-3 fatty acids in their tissues and organs, according to a study published in the April 2006 issue of *Nature Biotechnology*.

Livestock cannot convert other fatty acids into omega-3 because they lack a *fat-1* gene, such as the one commonly found in the roundworm *C. elegans*. By inserting a modified version of this gene into fetal pig cells, the scientists were able to create cloned pig embryos that developed into animals with elevated levels of omega-3 fatty acids.

The cloned pigs contained roughly 8 percent of omega-3 and other healthy fatty acids, compared with less than 1 percent found in regular pigs. Scientists say the pigs could be used as models to study the importance of omega-3 fatty acids in prevention and treatment of coronary heart disease, immune-mediated disor-

ders, and other clinical conditions. Additional research is needed to determine if these genetically altered pigs might also be safe for human consumption.

▶ Key Psoriasis Gene Found

In the most extensive international study of a psoriasis gene to date, scientists at the University of Michigan have discovered a common genetic variation that makes people prone to developing the disease, which affects roughly 2 percent of the U.S. population and is characterized by itchy, red patches of skin.

The gene PSORS1, or psoriasis susceptibility 1, was identified in a clinical research study involving more than 2,700 individuals in which at least one family member had the disease. The study was assisted by the university's General Clinical Research Center, which has supported research on the genetics of psoriasis for more than a decade.

PSORS1 is the major gene, but not the only one, involved in the disease. People must inherit several psoriasis genes and be exposed to an environmental trigger, such as strep throat, to develop the condition.

Understanding the role of the PSORS1 gene may lead to developing new and more effective treatments for the disease. The study appears in the May 2006 issue of the *American Journal of Human Genetics*.

▶ Tracking Avian Flu

Scientists in Alaska are on the lookout for the first signs of avian flu. Alaska's unique location—at the intersection of Asian and North American flyways—makes the state an ideal site for studying the virus in migratory birds.

Researchers at the University of Alaska have collected 4,500 samples from ducks, geese, and shorebirds in collaboration with federal and state agencies. So far only 30 samples have tested positive for various flu viruses, but none for avian flu of Asian origin. The work is funded in part by NCRR's IDEa Networks of Biomedical Research Excellence.

Virus surveillance in migratory birds will help scientists model how new viruses emerge and mutate. This, in turn, can help public health officials plan and implement public measures for future outbreaks. ■

■ On the lookout for avian flu, researchers collect a sample from a migratory goose in Alaska.

